

Physical Assessments are Essential to Patient Outcomes: Are RN's Really Performing Them?

Anita G. Fennessey DrNP, RN, CNE

Disclosure Statement

- I have no actual or potential conflict of interest in relation to this program/presentation.

Objectives

- Describe the relationship between RNs not performing adequate physical assessment exams and the occurrence of sentinel events.
- Explain the significance of RNs consistently performing physical assessment exams.
- Describe potential ethical and legal considerations when RNs do not consistently perform physical assessment exams.
- Discuss the implications of this study and the need for additional studies related to the completion of physical assessment exams by RNs.

Introduction

- Between 210,000 and 440,000 patients die each year as a result of some type of preventable harm that occurred during their hospitalization.
- Global statistics indicates that one in every 300 errors results in death.
- Evidence has shown that incorrect assessment of patient conditions was found to be the second leading cause of sentinel events.

- Research has demonstrated that astute assessment is critical to safe patient care and competent nursing practice.
- Assessment is essential for both physicians and RNs as part of the problem-solving process in which both disciplines continually engage.

Objective of This Study

To identify the gap in knowledge regarding the variables that influence the performance of physical assessment skills by registered nurses.



Purpose of This Study

To determine the factors that affect the nurses' ability to consistently perform physical assessment exams.



Central Hypothesis of This Study

Currency of knowledge, burnout, and high workload affects the performance and accuracy of physical assessment exams by registered nurses (RNs).



Background and Significance

- What is the significance of RNs consistently performing physical assessment exams?
 - * Improved nurse-patient relationship
 - * Improved patient surveillance
 - * Decreased health care errors
 - * Better overall patient outcomes

- A sound physical assessment forms the groundwork for all planned nursing intervention.
- It is assumed that appropriate physical assessment skills by both registered nurses and physicians contribute to quality healthcare.
- This study investigated the contributory factors related to performance or non-performance of physical assessment skills by RNs.
- Do RNs actually assess their patients thoroughly using adequate physical assessment skills or do they just do quick focus or visual assessments?

- Does this type of cursory assessment occur because of lack of knowledge, burnout, or excessive workload?
- Are there are other contributing factors that are related to physical assessment skill performance by RNs?



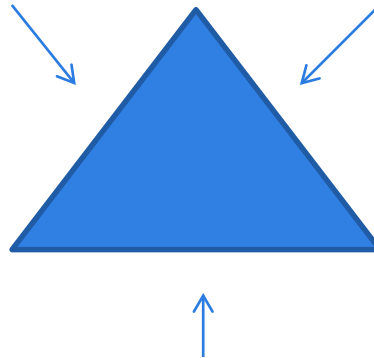
Specific Aims

- Explore the relationship between knowledge about physical assessment skills and the RNs' ability to perform physical assessment skills.
- Identify the relationship between RN burnout and the performance of physical assessment skills.
- Evaluate the relationship between how RNs perceive their work environment with the performance of physical assessment exams.

Theoretical Foundation

- According to Social Cognitive Theory, one's behavior is influenced reciprocally by cognitive and personal factors such as motivation and environmental factors (Bandura, 1986).
- Bandura's basic principle is that individuals are likely to participate in behaviors/activities to the degree that they see themselves as competent at those behaviors/activities (Bandura, 1986).

Social Cognitive Model Behavior (Performance of Assessment)

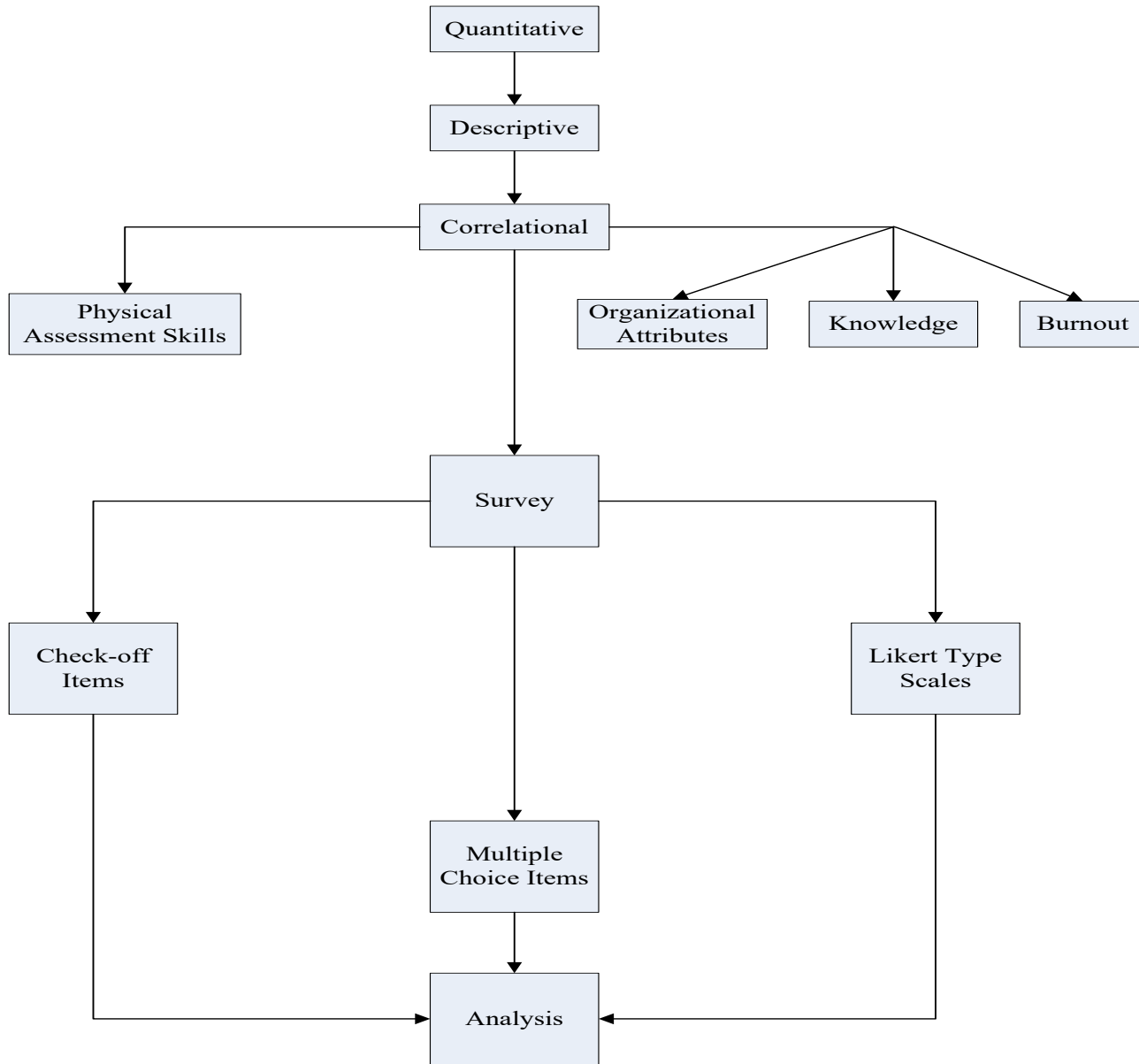


**Environmental Factors
Variables**
(Influenced by how RNs view themselves)

Institutional
(Patient & Staffing ratios)

Study Design

- This study was conducted using cross-sectional data collection survey.
- Descriptive surveys were used to collect interval ratio data.
- The demographic data form enabled the investigator to determine if there was a link between length of experience, types of experiences, and education with RNs' skill level in performing physical assessment exams.
- A convenience, non-probability sample was recruited from two hospitals.



Data Collection Methods

- Demographic data were gathered using an investigator-generated form that provided information regarding the nurse's:
 - Age and gender
 - Hours worked per week,
 - Years as a RN, marital status
 - Beginning level of education as RN
 - Present level of education
 - Current occupation in RN role
 - Work patterns
 - Physical assessment courses
 - Current area of practice.

- The Oldenburg Burnout Inventory (OLBI) was the instrument used to measure the degree of professional nurse burnout.
- The Nursing Work Index Revised (NWI-R) was used to measure the organizational attributes that may affect the RN's ability to consistently perform physical assessment skills.
- The Physical Assessment Performance Questionnaire (PAPQ) was utilized to test the RN's perceived knowledge and ability to perform a complete physical assessment exam (Yamauchi, 2001).

- A Physical Assessment Knowledge Test (PAKT) was developed as an attachment to the Physical Assessment Performance Questionnaire.
- PAKT included ten multiple-choice items that were similar to the type of NCLEX-RN- questions that would assess the RNs' basic knowledge of physical assessment physiology.



Results

- Overall, there was no statistical significance when reviewing the aims of this study.
- For example, one aim was that there would be a relationship between RN knowledge of physical assessment skills and performance of physical assessment skills.
- However, this study did not demonstrate that nurses who scored higher on the Physical Assessment Knowledge Test performed more physical assessment skills consistently ($r = .07$).

- However, on post-hoc analysis of the demographic data to the PAPQ, the subscales of frequency of use and extent of need from the PAPQ were statistically significant for the RNs who worked on the Critical Care and Telemetry Units as compared to the nurses who selected “Other” on the demographic data form which included Pediatrics, Neurological, Oncology, and Geriatrics .

- The findings of this post-hoc analysis indicated that RNs who work on Telemetry and Critical Care perceive that there is a need for physical assessment skills, and possibly as a result, perform physical assessment skills more frequently as compared to the nurses who work on Pediatric, Neurological, Oncology, and Geriatric units.

- The difference in frequency of performing assessments and extent of need between the Critical Care and Telemetry RNs with the RNs from Pediatrics, Neurological, Oncology, and Geriatrics has true clinical significance in that the patients on all of these other units are considered vulnerable and at risk, but not all are being equally assessed and monitored.



Discussion

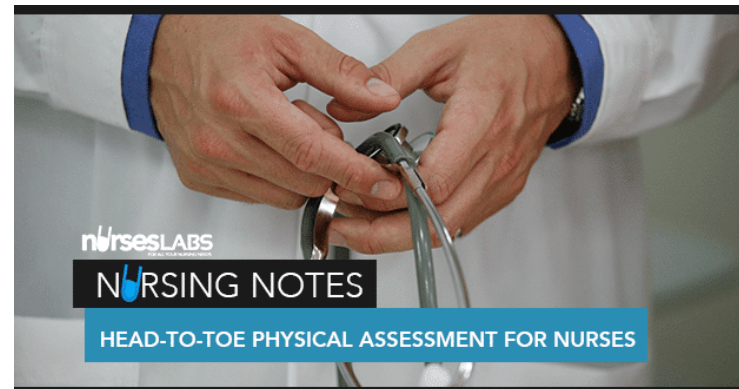
- Even though no specific significance between physical assessment performance and burnout, work environment, and/or knowledge was identified, its relevance and importance to patient outcomes were verified, especially as cited in the literature.
- The demographic data established a difference between frequencies of use of physical assessment exams based on the clinical unit where the nurse worked.
- This is significant when reviewing the units in which physical assessment exams appear to be done less often.

- Furthermore, it was also concerning to find that out of 28 physical assessment skills listed on the PAPQ, only seven were reported at greater than 80% for being done on a daily basis.
- This is an important finding given the higher acuity of the typical Medical-Surgical patient, along with the finding that in some of the other clinical areas, excluding Critical Care and Telemetry, nurses were not performing physical assessment exams as frequently as may be needed given the severity of their patient's disease processes or vulnerability of the patient.

Implications

- Clinical assessment skills are important to all levels of nursing practice.
- Since the goal of the professional nurse is to promote, reestablish, and preserve the optimal health of patients by assessing, diagnosing, and treating actual and potential health problems that can affect one's functional abilities, it is imperative that the nurse consistently and accurately assesses each and every patient (Keller, Edstrom, Parker, Gabrielle, & Kriewald, 2012).

- Performing a physical assessment is an essential skill that falls within the scope of nursing practice (Keller et al.).
- As a consequence, failure to perform physical assessment exams may result in the nurse not practicing within the expected standards of practice for the professional nurse (Keller et al.).



Next Steps

- Replicate study by redesigning how the nurse's assessment skills will be evaluated.
- Ensure that future studies clarify the nurse's definition of physical assessment performance.
- Develop a rapid and complete nursing assessment guide which is taught to undergraduate baccalaureate nursing students.
- Follow-up on how these graduate nurses are completing assessments at 1, 2 and 3 years post graduation and then correlate the number and level of associate adverse events.

Questions???



dreamstime.com

References

- Allen, M. (2013). How many die from medical mistakes in U.S. hospitals? Propublica. Retrieved from <http://www.propublica.org/article/how-many-die-from-medical-mistakes-in-us-hospitals>
- Bandura, A. (1986). *Social foundation of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Blackman, I., Lye, C., Darmawan, G., Henderson, J., Giles, T., & Willis, E. (2018). Modeling missed care: Implications for evidence-based practice. *Worldviews on Evidence-Based Nursing: Linking Evidence to Action*, 15, (3), 178-188.
- Bureau of Health Planning: Division of Plan Development. (2013). *2010/2011 Pulse of Pennsylvania's registered nurse workforce*. Harrisburg, PA: Pennsylvania Department of Health.
- Curry, J. & Jungquist, C. (2014). A critical assessment of monitoring practices, patient deterioration, and alarm fatigue on inpatient wards: a review. *Patient Safety in Surgery*, 8(29), 1-20.
- Joint Commission (2013). Sentinell event data: Root causes by event type 2004 – 2013. The Joint Commission. Retrieved from http://www.jointcommission.org/assets/1/18/Root_Causes_by_Event_Type_2004-2Q2013.pdf
- Keller, S., Edstrom, A., Parker, W., Gabrielle, C., & Kriewald, M. (2012). *Scope and standards of medical-surgical nursing practice* (5th Ed.). Pitman, New Jersey: Academy of Medical-Surgical Nurses
- McGlinsey, A. & Kirk, A. (2013). Early identification of neurological deterioration is vital to preventing secondary brain injury. *Advance for Nurses*. Retrieved from <http://nursing.advanceweb.com/Continuing-Education/CE-Articles/Neurological-Assessment.aspx>
- Nugent, P, & Vitale, B. (2014). *Fundamentals of nursing: Content review plus practice questions*. Philadelphia, Pa: F.A. Davis.
- Rosales, R., Labrague, L., & Rosales G. (2013). Nurses' job satisfaction and burnout: Is there a connection? *International Journal of Advanced Nursing Studies*, 2, 1-10.
- Yamauchi, T. (2001). Correlation between work experiences and physical assessment in Japan. *Nursing & Health Sciences*, 3, 213-224.



Jefferson

**Philadelphia University +
Thomas Jefferson University**

HOME OF SIDNEY KIMMEL MEDICAL COLLEGE